



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/589,945

04/22/2008

Kenneth Goransson

47113-5092-00-US

2362

55694 7590 08/10/2009  
DRINKER BIDDLE & REATH (DC)  
1500 K STREET, N.W.  
SUITE 1100  
WASHINGTON, DC 20005-1209

EXAMINER

YEE, DEBORAH

ART UNIT

PAPER NUMBER

1793

MAIL DATE

DELIVERY MODE

08/10/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/589,945	<b>Applicant(s)</b> GORANSSON ET AL.	
	<b>Examiner</b> Deborah Yee	<b>Art Unit</b> 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/27/06;10/11/06;08/18/06</u> .                              | 6) <input type="checkbox"/> Other: ____.                          |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 7 and 8 provides for the use of ferritic steel alloy for support material in catalytic converter application and in heating and furnace applications, respectively, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 7 and 8 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 1793

4. Claims 1 to 4, 6, 7 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 5,426,084 ("Fukaya").
5. Specific steel examples in tables 1-12 of Fukaya meet the composition recited by claims 1 to 4 and 9.
6. In addition, prior art steel is made in the form of strip or foil for a support member in a catalytic converter and therefore meet claims 6 and 7.
7. Claims 1, 3, 4, 6, 7 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 5,286,442 ("Uematsu").
8. Specific steel example 7 in table 4 of columns 7-8 in Uematsu meets the composition recited by claims 1, 3, 4 and 9.
9. In addition, prior art steel is made in the form of strip or foil for a support member in a catalytic converter and therefore meet claims 6 and 7.

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,426,084 ("Fukaya") or US Patent 5,286,442 ("Uematsu").
12. The steel of Fukaya or Uematsu, discussed supra, meets claimed composition . Even though prior art does not teach using steel in a heating and furnace application as

Art Unit: 1793

recited by claim 8, such would be an obvious use since steel exhibits the high temperature oxidation resistant properties desired and sought for said application.

13. Claims 1 to 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over European patent 0688882 ("EP-882") cited in Applicant's IDS filed December 27, 2006 alone or in view of US Patent 5,426,084 ("Fukaya").

14. EP-882 in claims 1 to 3 on page 11 teaches an Al-coated steel alloy made in the same manner as present invention comprising the steps of coating a substrate steel alloy with Al or an alloy of Al.

15. The substrate steel alloy of EP-882 in claims 1 to 3 has a composition with constituents whose wt% ranges overlap those recited by claim 5; and such overlap establishes a prima facie case of obviousness because it would be obvious for one skilled in the art to select the claimed alloy wt% ranges over the broader disclosure of the prior art since the prior art teaches the same utility to use in high temperature application and similar high temperature oxidation resistant properties, see MPEP 2144.05.

16. The substrate steel alloy of EP-882 is then coated with Al to produce a resultant alloy that would suggest the resultant alloy composition recited by claims 1, 3, 4, 9 and 10 since the substrate steel alloy composition and process of making by coating with Al closely meet the recited claims and in absence of evidence to the contrary.

17. More specifically, prior art substrate steel examples 4 and 5 in table 1 on page 6 meet the claimed composition except for the absence of Nb. Nevertheless, Nb would be obvious to incorporate since a broad range of Ti, Nb, V and/or Zr in total amount of (%C

Art Unit: 1793

+ %N)x4 -0.8% is taught. The steel examples 4 and 5 in table 1 are then formed into foil 5  $\mu\text{m}$  thick and coated with 2  $\mu\text{m}$  thick Al by evaporation deposition according to Example 3 on page 9 to exhibit a resultant steel alloy example 17 that contains 5.1% Al and is within the claimed Al range of 4.5 to 12% Al of the present invention resultant alloy.

18. In regard to claims 6 to 8, the coated steel of EP-882 on lines 1 to 51 on page 3 can be use in the form of wire, strip, foil and/or tube in high temperature applications, including a support material in catalytic converter or heating equipment such as a furnace.

19. EP-882 does not teach replacing Mo entirely or partly with W as recited by claim 2 but such substitution would be a matter of choice well within the skill of the artisan to incorporate since it is well known in the metallurgical art that Mo and W are similar in properties and can be used interchangeably as evident by Fukaya on lines 4 to 53 of column 10.

20. For the foregoing reasons, claims would not patentably distinguish over prior art.

### ***Specification***

The disclosure is objected to because of the following informalities: In specification, the decimal point should be represented by a period and not a comma, for e.g. instead of "0,052", it should be --0.052--.

Appropriate correction is required.

Art Unit: 1793

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Deborah Yee whose telephone number is 571-272-1253. The examiner can normally be reached on monday-friday 6:00 am-2:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on 571-272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Deborah Yee/  
Primary Examiner  
Art Unit 1793

/DY/